CLAIMS

1. A curable composition comprising the following four components as essential components:

(A) a vinyl polymer (I) containing at least one hydrosilylatable alkenyl group per molecule;

(B) a hydrosilyl group-containing compound (II);

(C) a hydrosilylation catalyst; and

(D) a metal soap.

2. The curable composition according to Claim 1, wherein the vinyl polymer (I) has a molecular-weight distribution of less than 1.8.

3. The curable composition according to Claim 1 or 2, wherein the main chain of the vinyl polymer (I) is produced by mainly polymerizing a monomer selected from the group consisting of (meth)acrylic monomers, acrylonitrile monomers, aromatic vinyl monomers, fluorine-containing vinyl monomers, and silicon-containing vinyl monomers.

4. The curable composition according to any one of Claims 1 to 3, wherein the vinyl polymer (I) is a (meth)acrylic polymer.

5. The curable composition according to any one of Claims 1 to 4, wherein the vinyl polymer (I) is an acrylic polymer.

6. The curable composition according to any one of Claims 1 to 5, wherein the vinyl polymer (I) is an acrylate polymer.

7. The curable composition according to any one of Claims 1 to 6, wherein the main chain of the vinyl polymer (I) is produced by living radical polymerization.

8. The curable composition according to Claim 7, wherein the living radical polymerization is atom transfer radical polymerization.

9. The curable composition according to Claim 8, wherein the atom transfer radical polymerization is carried out using, as a catalyst, a transition metal complex of an element selected from Groups 7, 8, 9, 10, and 11 of the periodic table as a central metal.

10. The curable composition according to Claim 9, wherein the metal complex used as the catalyst is a complex selected from the group consisting of copper complexes, nickel complexes, ruthenium complexes, and iron complexes.

11. The curable composition according to Claim 10,

wherein the metal complex used as the catalyst is a copper complex.

12. The curable composition according to any one of Claims 1 to 11, wherein the component (A) is a vinyl polymer produced by a process comprising the steps of:

(1) subjecting a vinyl monomer to atom transfer radical polymerization to produce a vinyl polymer having a terminal structure represented by general formula (1):

$-C(R^1)(R^2)(X)$ (1)

(wherein R^1 and R^2 each represent a group bonded to an ethylenically unsaturated group of a vinyl monomer, and X represents a chlorine, bromine, or iodine atom); and

(2) converting the terminal halogen of the polymer into a substituent containing a hydrosilylatable alkenyl group.

13. The curable composition according to any one of Claims 1 to 11, wherein the component (A) is a vinyl polymer produced by a process comprising the steps of:

(1) subjecting a vinyl monomer to living radical polymerization to produce a vinyl polymer; and

(2) subjecting a compound having at least two alkenyl groups with low polymerizability to reaction with the vinyl polymer.

14. The curable composition according to any one of Claims 1 to 13, wherein the vinyl polymer (I) contains a hydrosilylatable alkenyl group at a terminus of the polymer.

15. The curable composition according to any one of Claims 1 to 14, wherein the hydrosilyl group-containing compound (II) is an organohydrogen polysiloxane.

16. The curable composition according to any one of Claims 1 to 15, wherein the component (D) is a metal stearate.

17. The curable composition according to Claim 16, wherein the component (D) is at least one metal stearate selected from the group consisting of calcium stearate, magnesium stearate, and zinc stearate.

18. The curable composition according to any one of Claims 1 to 17, further comprising, as a component (E), reinforcing silica.

19. The curable composition according to Claim 1, wherein the molar ratio of the alkenyl group of the component (A) to the hydrosilyl group of the component (B) is 5 to 0.2, the component (C) is used in an amount of 10^{-1} to 10^{-8} mole per

mole of the alkenyl group of the component (A), and the component (D) is used in an amount of 0.025 to 5 parts by weight relative to 100 parts by weight of the component (A).

20. A method for improving mold release properties of a cured object comprising adding (D) a metal soap to a curable composition containing, as essential components, (A) a vinyl polymer (I) containing at least one hydrosilylatable alkenyl group per molecule, (B) a hydrosilyl group-containing compound (II), and (C) a hydrosilylation catalyst.

21. A cured object prepared from the curable composition according to any one of Claims 1 to 19.

22. The cured object according to Claim 21, wherein the cured object is not substantially damaged during removal from mold after formation of a molded object.